comprehensive environmental evalua-

- (h) Environmental review means the environmental review required by the provisions of this part, and includes preliminary environmental review and preparation of an environmental document, and review by the parties to the Protocol, and committees established under the Protocol for that purpose, and the public, as applicable.
- (i) Executive Order means Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, 44 FR 1957.
- (j) *Initial Environmental Evaluation* or *IEE* means a study of the reasonably foreseeable potential effects of a proposed action on the antarctic environment, prepared in accordance with the provisions of §641.17.
- (k) Preliminary environmental review means the environmental review described in §641.15(a).
- (1) Protocol means the Protocol on Environmental Protection to the Antarctic Treaty, adopted on October 4, 1991, in Madrid, at the fourth session of the Eleventh Special Antarctic Treaty Consultative Meeting and signed by the United States on that date, and all annexes thereto.
- (m) Responsible official means the Director of the Office of Polar Programs, or any NSF employee(s) designated by the Director to be principally responsible for the preparation of environmental action memoranda or environmental documents under this part.
- (n) Treaty means the Antarctic Treaty signed in Washington, D.C., on December 1, 1959, T.I.A.S No. 4780.

 $[57~{\rm FR}~40339,~{\rm Sept.}~3,~1992,~{\rm as~amended~at}~59~{\rm FR}~37438,~{\rm July}~22,~1994]$

§ 641.15 Preliminary environmental review.

(a) The responsible official shall be notified early in the general planning process of actions proposed by USAP components that may have impacts on the Antarctic environment, so that environmental review may be integrated into the planning and decisionmaking processes. The responsible official shall conduct a preliminary environmental review of each action, including consideration of the potential direct and reasonably foreseeable indirect effects of a

proposed action on the Antarctic environment.

(b) If, on the basis of the preliminary environmental review, the responsible official determines that an action will have less than a minor or transitory impact on the Antarctic environment, he will prepare an Environmental Action Memorandum briefly summarizing the environmental issues considered and conclusions drawn from the review. No further environmental review shall be necessary.

§ 641.16 Preparation of environmental documents, generally.

- (a) Preparation of an environmental document. If the responsible official determines, either initially or on the basis of a preliminary environmental review, that a proposed action may have at least a minor or transitory impact on the Antarctic environment, he will prepare an environmental document in accordance with the provisions of this part. In making this determination, the responsible official should consider whether and to what degree the proposed action:
- (1) Has the potential to adversely affect the Antarctic environment;
- (2) May adversely affect climate and weather patterns:
- (3) May adversely affect air or water quality:
- (4) May affect atmospheric, terrestrial (including aquatic), glacial or marine environments:
- (5) May detrimentally affect the distribution, abundance or productivity or species, or populations of species of fauna and flora:
- (6) May further jeopardize endangered or threatened species or populations of such species;
- (7) May degrade, or pose substantial risk to, areas of biological, scientific, historic, aesthetic or wilderness significance:
- (8) Has highly uncertain environmental effects, or involves unique or unknown environmental risks; or
- (9) Together with other actions, the effects of any one of which is individually insignificant, may have at least minor or transitory cumulative environmental effects.

§641.16

- (b) Prior assessments. Notwithstanding the provisions of §641.16(a), if (1) An environmental document (including a generic or programmatic CEE) or its equivalent has been prepared for a particular type of action; (2) That document includes an analysis of potential environmental effects that are directly relevant to the potential effects of the proposed action, taking in account factors such as the similarity of the actions and of the locations within which they take place; and (3) There are no potential site specific or other impacts that would require further evaluation, then a new environmental document need not be prepared. Instead, the responsible official shall prepare an Environmental Action Memorandum for the proposed action, cross-referencing the previously prepared environmental document.
- (c) Exclusions. NSF has determined that the following actions will have less than a minor or transitory impact on the Antarctic environment, and are not subject to the procedures set forth in this part, except to the extent provided herein:
- Scientific research activities involving:
- (i) Low volume collection of biological or geologic specimens, provided no more mammals or birds are taken than can normally be replaced by natural reproduction in the following season;
- (ii) Small-scale detonation of explosives in connection with seismic research conducted in the continental interior or Antarctica where there will be no potential for impact on native flora and fauna;
- (iii) Use of weather/research balloons, research rockets, and automatic weather stations that are to be retrieved; and
- (iv) Use of radioisotopes, provided such use complies with applicable laws and regulations, and with NSF procedures for handling and disposing of radioisotopes.
- (2) Interior remodelling and renovation of existing facilities.

Notwithstanding the foregoing, if information developed during the planning of any of the actions described in this paragraph (c) indicates the possibility that the action may have at least a minor or transitory impact on

the Antarctic environment, the environmental effects of the action shall be reviewed to determine the need for the preparation of an environmental document.

- (d) Coordination with other committees, offices and federal agencies. The responsible official shall notify NSF's Committee of Environmental Matters when he intends to prepare an environmental document, and will coordinate preparation of the document with those entities. Responsibility for preparation of the environmental document rests primarily with the responsible official, but, as soon as is feasible, he should consult with and encourage the participation of other knowledgeable individuals within NSF, and, where appropriate, with other individuals, government agencies and entities with relevant knowledge and expertise.
- (e) Type of environmental document. The type of environmental document required under this part depends on the nature of the proposed action under consideration. An IEE must be prepared for proposed actions which the responsible official concludes may have at least a minor or transitory impact on the Antarctic environment and for which a CEE is not prepared. A CEE must be prepared if an IEE indicates, or if it is otherwise determined, that a proposed action is likely to have more than a minor or transitory impact on the Antarctic environment.
- (f) Obligation of funds. Because of logistic constraints (i.e., constraints due to transportation difficulties, inaccessibility of Antarctic bases for much of the year, and the need to obtain items or materials requiring long lead times), it may not be possible to complete the environmental review of a proposed action before funds must be committed and/or disbursed. In such cases, funds for the proposed action may be committed and/or disbursed, provided:
- (1) The appropriate environmental review is completed before implementation of the proposed action in Antarctica, and
- (2) Implementation plans for the proposed action will be modified or canceled, if appropriate, in light of the

completed environmental review (including public comments, if applicable).

[57 FR 40339, Sept. 3, 1992, as amended at 59 FR 37438, July 22, 1994]

§641.17 Initial environmental evalua-

- (a) Contents. An IEE shall contain sufficient detail to assess whether a proposed action may have more than a minor or transitory impact on the Antarctic environment, and shall include the following information:
- (1) A description of the proposed action, including its purpose, location, duration and intensity; and
- (2) Consideration of alternatives to the proposed action and any impacts that the proposed action may have on the Antarctic environment, including cumulative impacts in light of existing and known planned actions and existing information on such actions.
- (b) Further environmental review. If an IEE indicates that a proposed action is likely to have no more than a minor or transitory impact on the Antarctic environment, no further environmental review of the action is necessary provided that appropriate procedures, which may include monitoring, are put in place to assess and verify the impact of the action.
- (c) Availability to public. An annual list of IEEs and a description of any decisions taken in consequence thereof shall be provided to the Department of State for circulation to all Parties to the Protocol and to organizations or committees established pursuant to the Protocol or the Treaty, as required. The Environmental Officer, Division of Polar Programs, shall also make the list and copies of final IEEs available to the public upon request.

§ 641.18 Comprehensive environmental evaluation.

(a) Scoping. If it is determined that a CEE will be prepared, the responsible official shall publish a notice of intent to prepare a CEE in the FEDERAL REGISTER, inviting interested persons and government agencies to participate in the process of identifying significant issues relating to the proposed action and determining the scope of the issues to be addressed in the CEE.

- (b) Contents of CEE. A CEE shall be a concise and analytical document, prepared in accordance with the range of relevant issues identified in the scoping process. It shall contain sufficient information to permit informed consideration of the reasonably foreseeable potential environmental effects of a proposed action and possible alternatives to that proposed action. Such information shall include the following:
- (1) A description of the proposed action including its purpose, location, duration and intensity;
- (2) A description of the initial baseline environmental state with which predicted changes are to be compared, and a prediction of the future environmental state in the absence of the proposed action:
- (3) A description of the methods and data used to forecast the potential impacts of the proposed action;
- (4) An estimate of the nature, extent, duration and intensity of the likely direct potential impacts of the proposed action:
- (5) A consideration of the potential indirect or second order impacts from the proposed action;
- (6) A consideration of potential cumulative impacts of the proposed action in light of existing activities and other known planned actions and available information on those actions;
- (7) A description of possible alternatives to the proposed action, including the alternative of not proceeding, and the potential consequences of those alternatives, in sufficient detail to allow a clear basis for choice among the alternatives and the proposed action:
- (8) Identification of measures, including monitoring, that could be employed to minimize, mitigate or prevent potential impacts of the proposed action, detect unforeseen impacts, provide early warning of any adverse effects, and carry out prompt and effective response to accidents;
- (9) Identification of unavoidable potential impacts of the proposed action;
- (10) Consideration of the potential effects of the proposed action on the conduct of scientific research and on other existing uses and values;